

Submit to Appropriate  
District Office  
State Lease - 6 copies  
Fee Lease - 5 copies  
DISTRICT I  
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II  
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III  
1000 Rio Brazos Rd, Aztec, NM 87410

State of New Mexico  
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

2040 Pacheco St.  
Santa Fe, NM 87505

Form C-105  
Revised 1-1-89

WELL API NO.	30-025-26280
5. Indicate Type of Lease	STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No.	B-229-1
7. Lease Name or Unit Agreement Name	Arnott Ramsay "NCT-B"
8. Well No.	8
9. Pool name or Wildcat	Jalmat (T-Y-7R) Oil

WELL COMPLETION OR RECOMPLETION REPORT AND LOG					
1a. Type of Well: OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> DRY <input type="checkbox"/> OTHER <input type="checkbox"/>			7. Lease Name or Unit Agreement Name		
b. Type of Completion: NEW WELL <input type="checkbox"/> WORK OVER <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/> DIFF RESVR <input type="checkbox"/> OTHER <input type="checkbox"/>			8. Well No.		
2. Name of Operator Doyle Hartman			9. Pool name or Wildcat		
3. Address of Operator 500 N. Main St., Midland, TX 79701, (432) 684-4011			Jalmat (T-Y-7R) Oil		
4. Well Location Unit Letter <u>N</u> : <u>660'</u> Feet From The <u>South</u> Line and <u>1980'</u> Feet From The <u>West</u> Line Section <u>32</u> Township <u>25S</u> Range <u>37E</u> NMPM Lea County					
10. Date Spudded 04/26/1979	11. Date T.D. Reached 05/02/1979	12. Date Compl. (Ready to Prod.) 10/06/2001	13. Elevations (DF & RKB, RT, GR, etc.) 2979' GR	14. Elev. Casinghead 2981'	
15. Total Depth 3630'	16. Plug Back T.D. 3175'	17. If Multiple Compl. How Many Zones?	18. Intervals Drilled By	Rotary Tools 0' - 3630'	Cable Tools
19. Producing Interval(s), of this completion - Top, Bottom, Name 2735' - 3033' (Y-7R)					20. Was Directional Survey Made No
21. Type Electric and Other Logs Run DS-CNL-GR-CCL, VDCBL-GR-CCL					22. Was Well Cored No

23. CASING RECORD (Report all strings set in well)					
CASING SIZE	WEIGHT LB/FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
8 5/8"	24 #/ft	363'	12 1/4"	300 sx	Circ.
5 1/2"	15.5 & 14 #/ft	3630'	7 7/8"	900 sx	Circ.
24. LINER RECORD					
SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN	25. TUBING RECORD
					SIZE
					DEPTH SET
					PACKER SET
26. Perforation record (interval, size, and number) 2735' - 3033' w/ (28) 0.38" x 17" Holes			27. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC.		
			DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED	
			2735' - 3033'	A/ 6450 Gal.	
			2735' - 3033'	SWF/ 210,227 Gal. & 500,000 #	

28. PRODUCTION					
Date First Production 10/06/2001		Production Method (Flowing, gas lift, pumping - Size and type pump) Flowing / Pumping (6.8 x 64 x 1 1/4)			
Date of Test 10/21/2001	Hours Tested 24 Hrs	Choke Size 40/128	Prod'n For Test Period	Oil - BbL. 3	Gas - MCF 235
Flow Tubing Press. ---	Casing Pressure 15 psig	Calculated 24-Hour Rate	Oil - BbL. 3	Gas - MCF 235	Water - BbL. 19
29. Disposition of Gas (Sold, used for fuel, vented, etc.) Sold					Test Witnessed By Don Mashburn
30. List Attachments					

31. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief					
Signature <u>Steve Hartman</u>		Printed Name <u>Steve Hartman</u>		Title <u>Engineer</u>	Date <u>10/17/2005</u>

2A Langlie matrix SR - QN-GB KS

## INSTRUCTIONS

This form is to be filed with the appropriate District Office of the Division not later than 20 days after the completion of any newly-drilled or deepened well. It shall be accompanied by one copy of all electrical and radio-activity logs run on the well and a summary of all specific tests conducted, including drill stem tests. All depths reported shall be measured depths. In the case of directionally drilled wells, true vertical depths shall also be reported. For multiple completions, Items 25 through 29 shall be reported for each zone. The form is to be filed in quintuplicate except on state land, where six copies are required. See Rule 1105.

INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

## Southeastern New Mexico

## Northwestern New Mexico

T. Anhy _____	T. Canyon _____	T. Ojo Alamo _____	T. Penn. "B" _____
T. Salt _____	T. Strawn _____	T. Kirtland-Fruitland _____	T. Penn. "C" _____
B. Salt _____ 2580'	T. Atoka _____	T. Pictured Cliffs _____	T. Penn. "D" _____
T. Yates _____ 2732'	T. Miss _____	T. Cliff House _____	T. Leadville _____
T. 7 Rivers _____ 2980'	T. Devonian _____	T. Menefee _____	T. Madison _____
T. Queen _____ 3396'	T. Silurian _____	T. Point Lookout _____	T. Elbert _____
T. Grayburg _____	T. Montoya _____	T. Mancos _____	T. McCracken _____
T. San Andres _____	T. Simpson _____	T. Gallup _____	T. Ignacio Otzte _____
T. Glorieta _____	T. McKee _____	Base Greenhorn _____	T. Granite _____
T. Paddock _____	T. Ellenburger _____	T. Dakota _____	T. _____
T. Blinebry _____	T. Gr. Wash _____	T. Morrison _____	T. _____
T. Tubb _____	T. Delaware Sand _____	T. Todilto _____	T. _____
T. Drinkard _____	T. Bone Springs _____	T. Entrada _____	T. _____
T. Abo _____	T. _____	T. Wingate _____	T. _____
T. Wolfcamp _____	T. _____	T. Chinle _____	T. _____
T. Penn _____	T. _____	T. Permian _____	T. _____
T. Cisco (Bough C) _____	T. _____	T. Penn. "A" _____	T. _____

### OIL OR GAS SANDS OR ZONES

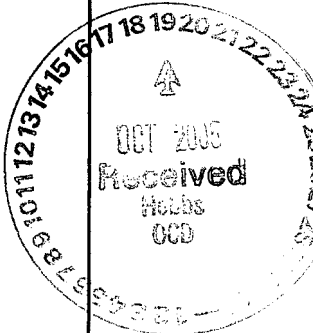
No. 1, from ..... to .....  
No. 2, from ..... to .....  
No. 3, from ..... to .....  
No. 4, from ..... to .....

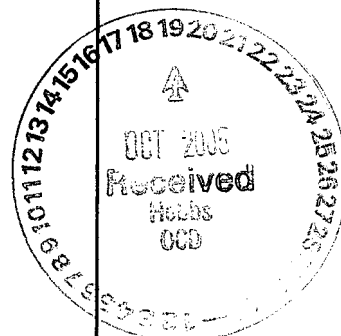
## IMPORTANT WATER SANDS

**Include data on rate of water inflow and elevation to which water rose in hole.**

No. 1, from ..... to ..... feet  
 No. 2, from ..... to ..... feet  
 No. 3, from ..... to ..... feet

## LITHOLOGY RECORD (Attach additional sheet if necessary)

From	To	Thickness in Feet	Lithology	From	To	Thickness in Feet	Lithology
							



### Details of Completed Operations

Moved well service unit onto abandoned Arnott Ramsay "NCT-B" No. 8 well. Pulled and laid down corroded 7/8" x 3/4" rod string. Tagged PBTD at 3475'. Pulled and laid down corroded 2 3/8" O.D. tubing.

Rigged up welder. Installed 5 1/2" slip x thread collar. Installed B&M Oil Tool 5 1/2" x 2 3/8" x 3 1/2" 3000-psi Type-MR tubinghead.

Rigged up Schlumberger. Logged well with DS-CNL-GR-CCL log (from 2480' to 3475') and VDCBL-GR-CCL log (from 2110' to 3475').

Ran and set Baker 5 1/2" Model "C" packer at 3125'. Rigged up Halliburton. Squeeze cemented Langlie Mattix perms, from 3334' to 3342', with 800 sx of API Class "C" neat cement, followed by 200 sx of API Class "C" cement containing 2% CaCl<sub>2</sub>, 3 lb/sx Gilsonite, 0.25 lb/sx Flocele, followed by 200 sx of API Class "C" cement containing 3% CaCl<sub>2</sub>, 3 lb/sx Gilsonite, 0.25 lb/sx Flocele. Displaced cement slurry with 15.4 bbls of water. Staged to a final squeeze pressure of 4034 psi.

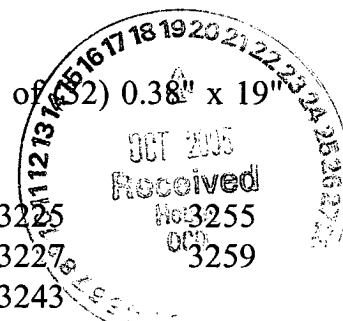
Rigged up reverse drilling unit. Ran 182.44' bottom-hole drilling assembly consisting of 4 3/4" bit, 5 1/2" casing scraper, and (6) 3 1/2" O.D. drill collars. Drilled cement from 3227' to 3390'. Before drilling below 3323', pressure tested 5 1/2" O.D. casing, from 0' to 3323', to 2000 psi. Pressure held okay.

Hooked up air unit. Unloaded water to blowdown tank.

Covered squeeze perms with 11 sx of 20/40 frac sand.

Rigged up wireline truck. Perforated 5 1/2" O.D. casing with a total of (32) 0.38" x 19" holes, with one shot each at:

2735	2766	2805	2830	2959	3225
2744	2776	2808	2833	2966	3227
2747	2781	2812	2946	2973	3243
2753	2797	2824	2950	3195	3246
2756	2802	2828	2956	3199	3252



Ran 5 1/2" Model "C" packer and 5 1/2" Model "C" RBP. Set 5 1/2" Model "C" RBP at 3285'. Raised 5 1/2" Model "C" packer to 3270'.

Spotted acid across and above perfs, from 2946' to 3259' (15 holes), by pumping 400 gal of 15% MCA acid, followed by 0.5 bbls of 2% KCl water. Allowed acid to fall and equalize.

Raised and set 5 1/2" Model "C" packer at 2898'. Pumped an additional 200 gal of 15% MCA acid down 2 3/8" O.D. tubing. Let acid soak for 30 minutes.

Acidized perfs, from 2946' to 3259' (15 holes), with an additional 2700 gal (total of 3300 gal) of 15% MCA acid and 21 ball sealers, at an average treating rate of 4.5 BPM and average treating pressure of 1400 psi. Flushed acid with 17.4 bbls of 2% KCl water.  $TP_{mx}=3100$  psi (at ballout).  $TP_{nm}=796$  psi.

ISIP = 50 psi  
1-min SIP = 0 psi

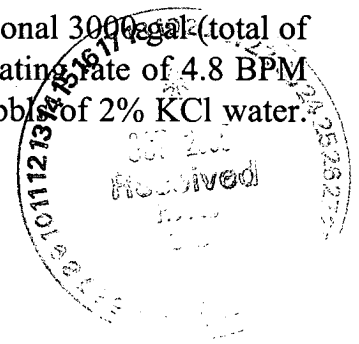
Surged off ball sealers. Displaced remaining 360 gal of 15% MCA acid.

Raised and set 5 1/2" Model "C" RBP at 2880'. Raised 5 1/2" Model "C" packer to 2850'. Spotted acid across and above upper perforations, by pumping 150 gal of 15% MCA acid, followed by 1.5 bbls of 2% KCl water. Allowed acid to fall and equalize.

Raised and set 5 1/2" Model "C" packer at 2671'. Pumped an additional 150 gal of 15% MCA acid down 2 3/8" O.D. tubing. Let acid soak for 30 minutes.

Acidized upper perfs, from 2735' to 2833' (17 holes), with an additional 3000 gal (total of 3300 gal) of 15% MCA acid and 23 ball sealers, at an average treating rate of 4.8 BPM and average treating pressure of 1950 psi. Flushed acid with 14.2 bbls of 2% KCl water.  $TP_{mx}=3100$  psi (at ballout).  $TP_{nm}=1100$  psi.

ISIP = 77 psi  
15-sec SIP = 0 psi



Pulled and laid down 5 1/2" Model "C" packer and 5 1/2" Model "C" RBP.

Ran and landed 2 3/8" O.D. tubing at 3285' (100 jts @ 32.38'/jt + 1.1' SN + 18' MA - 2' AGL + 10' KBC = 3285' RKB). Ran 3/4" API Class "KD" rod string and 2" x 1 1/4" x 12' RHAC insert pump. Commenced pumping well, on 8-15-01, at 6.8 Spm x 64" x 1 1/4".

Tested well as follows:

Date: 9-14-01  
Gas Rate = 4 MCFPD  
Water Rate = 6.7 BWPD

Moved in and rigged up well service unit, on 9-14-01. Pulled rods and tubing. Rigged up wireline truck. Set 5 1/2" CICR at 3175'.

Ran 2 3/8" O.D. tubing equipped with cementing stinger. Stung into CICR. Squeeze cemented lower Jalmat perms, from 3195' to 3273' (9 holes), with 300 sx of API Class "C" neat cement, followed by 200 sx of API Class "C" cement containing 2% CaCl<sub>2</sub>, 3 lb/sx Gilsonite, 0.25 lb/sx Flocele. Displaced cement slurry with 12.5 bbls of 2% KCl water. Final displacement pressure was 750 psi, at a displacement rate of 1 BPM.

Pulled out of retainer. Pulled and laid down cementing stinger.

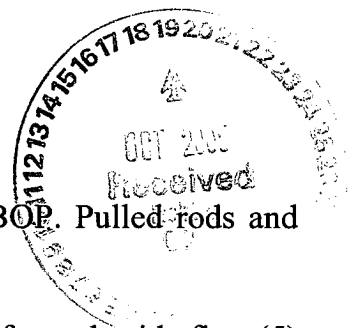
Ran and landed 2 3/8" O.D. tubing at 3123' RKB (95 jts @ 32.38'/jt + 1.1' SN + 18' MA + (2) 10' pup jts - 2' AGL + 10' KBC = 3123.2'). Ran 3/4" API Class "KD" rod string and 2" x 1 1/4" X 12' RHAC insert. Resumed pumping well at 6.8 Spm x 64" x 1 1/4".

Tested well as follows:

Date: 9-20-01  
Gas = 4 MCFPD  
Water = 0 BWPD

Moved in and rigged up well service unit, on 9-26-01. Installed BOP. Pulled rods and tubing.

Rigged up wireline truck. Ran 3 1/2" casing gun. Select-fire perforated with five (5) additional 0.38" x 19" holes, with one shot each at:



2986	3031
2989	3033
2903	

Ran and landed 2 3/8" O.D. tubing at 2717' RKB (83 jts @ 32.38'/jt + 1.1' SN + 18' MA + 2' CBJ - 2' AGL + 10' KBC = 2716.6').

Rigged up Halliburton. Performed CO<sub>2</sub> foam frac down 5 1/2" x 2 3/8" casing-tubing annulus, with 210,227 gal of gelled water and CO<sub>2</sub> (53.6% CO<sub>2</sub>) and 500,000 lb of frac sand (10% 20/40, 15% 10/20, 75% 8/12), at an average treating rate of 37.3 BPM, and average wellhead treating pressure of 2336 psi.

ISIP = 1004 psi  
5-min SIP = 938 psi  
10-min SIP = 917 psi  
15-min SIP = 899 psi

Left well shut in for one hour. Cleaned up well overnight to blowdown tank.

Rigged up high-volume air circulating equipment. Cleaned out frac sand to 3175'.

Raised bottom of 2 3/8" O.D. tubing to 3123.2' RKB (95 jts @ 32.38'/jt + 1.1' SN + 18' MA + (2) 10' pup jts - 2' AGL + 10' KBC = 3123.2'). Ran 3/4" API Class "KD" rod string and 2" x 1 1/4" x 12' RHAC insert pump. Commenced pump testing and cleaning up well, at 6.8 Spm x 64" x 1 1/4".

On 10-18-01, P/221 MCFPD + 4 BOPD + 17 BWPD; CP = 33 psi.

